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Personal Protective Equipment Policy

University of Maine System

Personal Protective Equipment Policy

Introduction

This policy applies to all University employees engaged in work relating to their employment or research activities, during which personal protective equipment (PPE) is needed for their protection. The purpose of this policy is to help ensure the safe assessment, selection and proper use of personal protective equipment.

This policy does not specifically address the requirements surrounding the use of PPE for specialty hazards such as: fall protection, respiratory protection, hearing protection, water hazards, laser eye protection, cryogenic exposure, and radiation protection.

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When Personal Protective Equipment Should be Considered

When engineering, work practice and administrative controls are not feasible or do not provide sufficient protection, supervisors must provide personal protective equipment (PPE) to their employees and ensure its use.

Prior to providing individuals with PPE, supervisors must determine whether or not the task requiring the use of the PPE is necessary. If the task is not necessary it should be eliminated. If the task is required, supervisors need to consider substituting the task for a less hazardous process (or chemical). If the task or hazards cannot be eliminated then engineering controls explored to minimize exposure. If workplace hazards cannot be managed through elimination, substitution, or engineering controls then PPE must be used to protect employees/students.

Regulatory Guidance

OSHA 29 CFR Subpart I - Personal Protective Equipment

General Requirements

- Personal protective equipment (PPE) must be selected based on the hazards present in the work environment and used in accordance with all manufacturer recommendations.

- Supervisors must complete a PPE Hazard Assessment and Certification Form for each job task that requires the use of PPE and maintain a copy of the assessment in the department/work area.

    - Job tasks having similar hazards, which require the same PPE, can be grouped together on a single PPE certification form (e.g. table saw operation and band saw operation).
    - For more information on how to complete the PPE Hazard Assessment and Certification Form, please refer to Appendix B of this policy.
    - When completed PPE assessments must be maintained by department and available for SM or any regulatory agency review.

- The OSHA standard makes clear that employers cannot require workers to provide their own PPE and the worker's use of PPE they already own must be completely voluntary. If a worker provides their own PPE, the employer must ensure that the equipment is adequate to protect the worker from hazards at the workplace. Costs for PPE such as, but not limited to, safety glasses, safety shoes / boots, and hard hats, should be paid for by department unless such equipment is used by the worker for personal use unrelated to work, research activities, or as outline in other University/Campus employee agreements.

Work Clothing and Personal Protective Equipment

Work clothing is to be appropriate for the tasks being performed. For example - loose fitting clothing should not be worn when working with or around rotating parts of equipment or machinery

Body, leg, and/or arm protection should be utilized any time the body, leg(s), and/or arm(s) are exposed to those hazards listed in the following table:

Eye and Face, Head, Foot, and Hand Protection General Guidance

Eye and Face Protection	Head Protection	Foot Protection	Hand Protection
Required when hazards exist from flying particles/objects, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation, conducting field work, etc.	Required when there is a potential for injury to the head from falling objects or other overhead hazards, etc.	Required when working in areas where there is a danger of foot injury due to falling or rolling objects, or objects piercing the sole, and where such employee's feet are exposed to electrical hazards, etc.	Required when hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; and harmful temperature extremes, etc.

NOTE: for more information about the hazards and associated PPE, please refer to Appendix A (of this policy) and the Personal Protective Equipment (PPE) Hazard Assessment and Certification Form (located on the Safety Management Documents webpage).

Training

Prior to using PPE, employees and students must be trained to understand the following:

- What PPE is needed, and when it is needed;
- How to properly put on, take off, adjust, and wear PPE;
- The limitations of the PPE;
- How to maintain and otherwise care for the PPE;
- The personal protective equipment's (PPE) useful life;
- When and how to dispose of the PPE; and
- All manufacturer recommendations.

Retraining is to be provided for those individuals who demonstrate a lack of understanding regarding any of the above topics.

Responsibilities

Directors and Department Heads must verify that supervisors comply with this policy. They are also required to ensure the completion of all necessary PPE assessments.

Supervisors ensure compliance with PPE standards and policies. In general, supervisors are responsible for:

- Performing a "hazard assessment" of the workplace to identify and control physical and health hazards. If supervisors need assistance completing PPE assessments, UMS Safety Management provides specialized training to support their needs in this area.
- Identifying and providing appropriate PPE for employee,
- Training employees in the use and care of the PPE,
- Maintaining PPE, including replacing worn or damaged PPE, and
- Periodically reviewing, updating and evaluating the effectiveness of the PPE program.

Employees and students are required to undergo training in accordance with this policy, and adhere to the guidelines and requirements taught during their training session. In general, employees should:

- Properly wear PPE,
- Attend training sessions on PPE,
- Care for, clean and maintain PPE, and
- Inform a supervisor of the need to repair or replace PPE.

For Additional Information

- Contact your campus safety coordinator
- Contact UMS Safety Management at (207) 581-4055
- Workplace Hazard Assessment and Personal Protective Equipment (PPE)
- PPE Hazard Assessment and Certification Form
- The University (or your campus) Respiratory Protection Program
- The University (or your campus) Hearing Conservation Program

Document History

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Appendix A – Personal Protective Equipment (PPE) Selection Guidance

This document is intended to help supervisors perform personal protective equipment assessments, and complete the PPE Hazard Assessment and Certification Form. If additional help is needed to complete the assessment(s) please contact your campus safety coordinator or UMS Safety Management (SM) at 581-4055.

The purpose of completing a written PPE Hazard Assessment and Certification Form is to determine what hazards are present and what PPE is necessary to protect employees/students and provide a systematic approach for documentation and training of future employees/students. Safety hazards will be categorized as physical (falling objects) and health hazards (chemical and biological hazards). Controls to eliminate the hazards will be implemented or PPE will be selected to perform the job tasks safely.

Selecting Personal Protective Equipment (PPE)

First – Supervisors should ask employees/students what PPE they feel is needed to complete their tasks safely. For instance, if employees/students are concerned about scraping their knees and that they think knee pads are needed (or supervision notices an overabundance of scraped knees), then the supervisor should assess whether the knee pads are needed or if employees/students practices should be altered.

Second - Supervisors must periodically monitor the employees/students performing their various job tasks, noting any hazards to which the employees/students are exposed. For example: if particles blow or fall into employees/students eyes then eye protection with side shields are needed. Or, if there is a potential for tree branches, rocks, or tools falling from above then, hard hats are required, unless the hazard is eliminated.

Watch for hazards based on the criteria set forth in the Personal Protective Equipment Policy and this selection guide.

Third - Once a PPE Hazard Assessment has been conducted, the supervisor must complete a PPE Hazard Assessment and Certification Form for each job task, and perform the required employee training as specified on the form. A copy of each certification must to be maintained on file in your department for Department of Labor (DOL) or UMS SM review.

Normal Work Clothing

Supervisors must determine what clothing is appropriate for each job task or work environment. For example - if employees are subject to having their legs, feet, and arms scraped (by rocks, raspberry bushes, willows, etc.) then long pants, long-sleeved shirts, socks, and closed toed shoes (no sandals) are required.

Factors which could affect the selection of normal work attire include, but are not limited to, temperature, biological activity (mosquitoes and black flies), and exposure to sunlight.

Respiratory Protection and Hearing Protection

Respirator selection is based upon potential contaminant(s), worker exposure level, and a work rate. The employee must be evaluated by a medical doctor to determine if they are *fit* to wear a respirator. You must consult with UMS SM prior to selecting any respiratory protection. After the selection process, the employee must be fit tested in the selected respirator.

Noise Exposures

Selection of hearing protectors should be based on the workers exposure (dose). If you believe that employees/students in your area are exposed to noise levels that warrant hearing protection, or if you are unsure whether or not hearing protection is needed, contact SM at (207) 581-4055 to have the noise exposure(s) assessed.

Eye and Face Protection

Eye and face protection is needed when employees/students are potentially exposed to hazards created by flying particles, molten metal, liquid chemicals, gases or vapors, or injurious light radiation.

Eye and face protection must meet the requirements as outlined in the American National Standards Institute (ANSI Z87.1). This equipment will be marked with "ANSI Z87", denoting that it meets these requirements.

Supervisors can use the following questions to help select eye and face protection:	**Yes**	**No**
Chemical Splashes		
Dust		
Smoke and Fumes		
Projectiles		
Welding		
Heat		
Glare		
Biohazards		
Supervisor's description of Eye and Face Hazards (for future reference):		

Based on the hazard(s) noted above what Eye and Face Protection is needed?	✓
Face Shield	
Splash Proof Goggles	
Puncture Resistant Glasses or Goggles	
Shaded Lenses	
Welding Mask	

Other (Explain)	

Head Protection

If individuals work in areas where they are potentially exposed to falling objects or overhead electrical hazards, then appropriate head protection is required.

Head protection must meet ANSI Z89.1 requirements for the associated hazards. There are different types of hard hats for different hazards. Approved head protection will be marked with the applicable ANSI Z89 number.

Hazards to consider Include:	**Yes**	**No**
Suspended loads that could fall?		
Beams or loads that could strike a worker's head?		
Live parts that may contact a worker's head?		
Overhead work being performed?		
Potential for moving objects in the air		
Supervisors description of overhead hazard(s), and description of required head protection:		

Based on the description above, is a hard hat needed, and if so what Class and Type?	✓
Class:	
Class G (General) - Impact and Penetration Resistant, and proof tested at 2200 volts.	
Class (Electrical) - Impact and Penetration Resistant, and proof tested at 20,000 volts.	
Class (Conductive) – This class has no electrical insulation, - Impact and Penetration Resistant.	

Type:	
Type I – Provides protection strictly from blows to the top of the head.	
Type II – Provides protection blows to the top of the head and sides of the head.	
Note: Bump Caps do not comply with ANSI guidelines and are not acceptable for occupations or applications where OSHA/DOL requires ANSI compliant hard hats.	

Foot Protection

Foot protection must be worn by individuals who work in areas where they are exposed to a danger of foot injuries created by falling or rolling objects, the presence of objects that could pierce the sole, and electrical hazards.

The footwear needs to meet ASTM 2412 and 2413 standards, and will be marked accordingly.

Are worker's feet exposed to:	**Yes**	**No**
Heavy materials that could fall?		
Sharp edges or points (puncture risk)?		
Exposed electrical wires?		
Unusually slippery/Icy conditions?		
Chemical hazard(s)?		
Supervisors description of foot hazards:		

If Safety Shoes are required, what type?	✓
Toe Protection	
Metatarsal Protection	
Puncture Resistant	
Electrical Insulation	
Other (Explain)	

Hand and Arm Protection

Appropriate hand protection must be selected for workers whose hands are exposed to chemicals that can be absorbed through the skin, sharp corners, edges or tools; surfaces that could severely abrade the skin; chemicals that could burn; temperatures that could damage the skin; splintering objects; and animal teeth, claws and/or stingers.

The following questions can be used to determine what hand/arm protection is needed:	**Yes**	**No**
Hazardous chemicals?		
Sharp Edges, Splinters, etc.?		
Extreme temperatures?		
Exposed Electrical Wires?		
Sharp Tools, Machine Parts, etc.?		
Abrading surfaces?		

Supervisors description of hand/arm hazards:

Type of hand/arm protection needed:	✓
Kevlar or Cut Resistant Gloves &/or Arm Protection.	
Leather Gloves &/or Arm Protection.	
Chemical Resistant Gloves &/or Arm Protection.	
Other (Explain)	

Selection and Use of Chemical Protective Clothing

More than just the Safety Data Sheets (SDS) should be consulted when selecting gloves, boots, or whole body protection to guard against chemical exposures. (*Note - When considering whole body protection please consider whether or not the hazard is in the solid, liquid, or gaseous state.) Safety Data Sheets provide a good starting place when selecting chemical protective clothing; however, SDS are very general and do not provide sufficient information. For instance - SDS will state that rubber gloves should be used to protect against chemical X. They do not specify the type of rubber glove(s) (i.e. neoprene, nitrile, natural rubber, etc.), nor do they state when to change the gloves.

Gather the information needed to select and change chemically protective clothing by referencing the clothing manufacturer's recommendations. Manufacturers test their chemical protective clothing against various chemicals, and then list the test results in a chart (i.e. glove chart). Note - Most manufacturers make this information available over the internet or you may contact SM for assistance.

Manufacturers list how much time is required for a chemical to breakthrough various materials (based on permeation rate and the thickness of the material). This time is known as the *breakthrough* time. For simplicity, clothing must be changed before breakthrough time has fully elapsed.

Final Note Regarding Exposure Live Electrical Components:

PPE selection and use only applies to workers qualified to conduct this type of work. Contact SM for further evaluation. DO NOT WORK on or near live electrical components. Eliminate electrical hazards by shutting off the electricity and Locking Out the main power source. Please reference Lock-Out Tag-Out/Zero Mechanical State policy and program for further information.

Appendix B – Personal Protective Equipment Assessment Guidance

Safety Management can provide guidance and support to supervisors and employees on a wide range of PPE matters. If you have any questions about any parts of your PPE program, please contact your campus safety personnel or UMS Safety Management at sem@maine.edu or phone 581-4055.

According to the OSHA standards, supervisors must assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment (PPE). OSHA also states that a PPE Assessment is required for each task where PPE is used to control the hazard

On the assessment, supervisors will verify that the required workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated; the person certifying that the evaluation has been performed; the date(s) of the hazard assessment; and, which identifies the document as a certification of hazard assessment.

Using the PPE Hazard Assessment and Certification Form (available on the SM Documents webpage), supervisors will complete the assessment with the following:

In the left column (Job Task), describes the task that the worker will be performing. For instance, bench grinding.

The middle column (Potential Hazards) are the hazards associated with this task. For example, bench grinding, there could be impact, flying objects and chips.

And on the right column (PPE Required) supervisors will list the PPE required to protect the employee from those hazards noted. Goggles and face shield for example.

In section at the bottom of the form, are the elements of training that supervisors must provide to employees that are required to wear PPE.

- When PPE is necessary
- What PPE is necessary
- How to properly don, doff, adjust, and wear the PPE
- The limitations of the PPE; and, the proper care, maintenance, useful life and disposal of the PPE.